

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Mark T. Holtzapple et al.  
Filing Date: October 31, 2003  
Title: **METHODS AND SYSTEMS FOR  
PRETREATMENT AND PROCESSING OF  
BIOMASS**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

PRELIMINARY AMENDMENT

Prior to calculation of the filing fee and the initial review of this patent application, please amend the application as follows:

AMENDMENTS TO THE CLAIMS

1. A system for processing biomass, comprising:
  - a water-impermeable bottom liner;
  - a gravel layer supported by the bottom liner;
  - a drain pipe disposed within the gravel layer;
  - a biomass input device operable to deliver biomass over the gravel layer to form a biomass pile;
  - a lime input device operable to deliver lime to the biomass for pretreating the biomass;
  - a distribution pipe elevated above the gravel layer; and
  - a pump operable to circulate water through the biomass pile by delivering water to the distribution pipe and receiving water from the drain pipe after it has traveled through the biomass pile.